NOTE V.

SYNONYMICAL REMARKS ABOUT PALAEMON NEGLECTUS NOV. NOM. AND PALAEMON REUNIONNENSIS HOFFM.

BY

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Plate 15.

Palaemon (*Eupalaemon*) *neglectus*, nov. nom.

(Plate 15, Fig. 6).

Palaemon acutirostris de Man, in: Journal Linnean Society, Vol. XXII, 1888, p. 280, Pl. XVIII, Fig. 7 (nec Dana).

Palaemon acutirostris Ortmann, in: Zoolog. Jahrb. V, Abth. f. System. 1891, p. 707.

Palaemon (*Eupalaemon*) *equidens* de Man, in: Max Weber's Zoolog. Ergebn. II, 1892, p. 453, Pl. XXVI, Fig. 37 (nec Dana).

Nec: *Palaemon reunionnensis* Hoffmann, Crustacés de Madagascar, 1874, p. 33, Pl. IX, Figs. 66 et 67.

This species was first made known in 1888 under the name of *Pal. acutirostris* in my work on the Crustacea of the Mergui Archipelago; six specimens had been captured at King Island, in freshwater, the seventh at Elphinstone Island. Soon afterwards, however, Dr. Ortmann (l. c.) doubted the identity of that Mergui species with Dana's *acutirostris*, which inhabits the Sandwich Islands. I also accepted this opinion and, in 1892, specimens of the same species that had been collected in rivers and brooks of

the lower Battak-Country, near Deli, East Coast of Sumatra, were referred by me to *Pal. equidens* Dana, a species from Singapore, which is, however, rather insufficiently known, because Dana's single specimen was mutilated in its second pair of feet, so that only the merus-joint was described and figured by him. In that new description (l. c. p. 454) I already observed that the merus-joint or arm of the second pair of legs of *Pal. equidens* Dana has a more slender shape than that of the freshwater *Palaemon* from Mergui and Deli; this fact was later confirmed by me (in: Zoolog. Jahrb. IX, Abth. f. System. 1897, p. 782) and I suggested here the opinion that not the freshwater species from Mergui and Deli, but *Pal. sundaicus* Heller ought to be considered as identical with *Pal. equidens* Dana. Therefore now the new name of *Pal. neglectus* is proposed for this freshwater species, which is no doubt different from *Pal. equidens* Dana as also from all its congeners: it has been sufficiently described and figured by me in the two quoted papers.

Palaemon (*Eupalaemon*) *neglectus* de M. is closely related to *Pal. lar* Fabr. The cephalothorax of the former, however, is rough and scabrous anteriorly, being covered here with minute spinules. The rostrum is $\frac{11-13}{3-4}$ toothed, that of *Pal. lar* (Figs. 1 and 5) $\frac{6-10}{2-4}$, and in *Pal. neglectus* four teeth are placed on the carapace or the fourth is situated above the orbital margin. Both species much agree with one another as regards the relative length of the joints of their 2nd pair of feet, but these legs present other differences. In *Pal. lar* Fabr. (Figs. 2 and 4) the joints of the 2nd legs are everywhere rather closely covered with minute sharp spinules, except on the fixed finger and on the inner side of the dactylus; on the outer border of the joints these spinules are slightly larger than on the inner; on the inner border and on the lower surface, however, larger and stouter, rather obtuse teeth of a brown colour are scattered between the closely arranged, minute spinules, though these teeth are also

rather little prominent (Fig. 4). The outer border of the dactylus (Fig. 3) is thickly beset with similar spinules as the outer border of the palm; they are wanting on the rest of this finger and on the index, whereas here small coarser teeth, similar to those of the inner border of the palm, are observed, though in a smaller number.

In *Pal. neglectus*, on the contrary, the outer border of the joints is, not rather thickly, beset with small, narrow, sharp spinules (Fig. 6); these spinules are fully wanting on the inner border and on the adjacent parts of the upper- and lower surface, whereas here much larger, prominent spinules are observed, rather few in number and between which the joints are quite smooth. These spinules on the inner border are much longer than those of *Pal. lar*, and they have also a more slender form (Fig. 6). The smaller spinules of the outer border of the palm are continued on to the outer border of the dactylus, whereas on the lower surface of this finger and on the free border of the index larger spinules occur. In younger specimens the spinules are fewer in number and less prominent.

It appears to me probable that, in the adult male of *Pal. neglectus*, the fingers of the 2nd pair of legs have a different form than in *Pal. lar*: I say probable, because only one adult male of this species has been examined by me at present. The fingers of *Pal. neglectus* (vide de Man, in: Max Weber's Zool. Ergebn. II, Tab. XXVI, Fig. 37*b*) taper rather regularly and the pointed tip of the fixed finger is not strongly curved inward. In adult male specimens of *Pal. lar*, lying before me, the fingers hardly taper distally and the tip of the fixed finger is strongly curved (Fig. 3). The toothing is also different. In *Pal. lar* (Fig. 3) the fixed finger carries a conical tooth not far from the articulation and, immediately behind it, one observes a much smaller, more obtuse prominence or tooth; in *Pal. neglectus*, the large tooth at the end of the cutting-edge is placed farther

distant from the articulation and there are three or four smaller teeth between both. In the adult male of *Pal. lar* one observes on the dactylus, between the tooth at the end of the cutting-edge and the articulation, six small, rounded teeth, of which the two or three proximal ones are somewhat more prominent than the following; in the adult male, long 85 mm., from the Battak-Country, however, the dactylus carries in one leg two, in the other (l. c. Fig. 37*b*) four acute teeth, of unequal size, and of which the foremost one is the largest and barely smaller than the 5th tooth at the end of the cutting-edge. In the male specimen from the Mergui Archipelago, described in 1888 under the name of *Pal. acutirostris*, the fingers were armed only with two, respectively three teeth at all.

In a younger male of *Pal. neglectus*, 58 mm. long, the fingers have still the same form as in *Pal. lar*, and their teeth are more obtuse.

To the preceding description may be added that in the adult male of *Pal. neglectus* the carpus of the 1st pair of legs is just twice as long as the chela.

Palaemon (*Eupalaemon*) *reunionnensis* Hoffm.

(Plate 15, Figs. 1—4).

Palaemon reunionnensis Hoffmann, Crustacés de Madagascar, 1874, p. 33, pl. IX, Figs. 66 et 67.

Palaemon Reunionnensis de Man, in: Notes from the Leyden Museum, I, 1879, p. 174.

Confer also: Miers, in: Annals and Mag. Nat. Hist. (5) Vol. 5, 1880, p. 43; Ortmann, l. c. p. 725 and Coutière, in: Annales Sciences Natur. 8e Série, T. XII, 1900, p. 301.

In 1892, when I was describing the specimens of *Pal. neglectus* from the Battak-Country, that were referred by me to *Pal. equidens* Dana, typical specimens of *Pal. reunionnensis* were not at my disposal. Nevertheless the latter species was considered by me as identical with that from

the Battak-Country, apparently because the legs of the second pair of the adult male from that locality bore a great resemblance with the figure of *Pal. equidens* Heller (in: Sitzungsber. Kais. Akad. Wiss. Wien, 1862, Tab. II, Fig. 44). Through the kindness of the Direction of the Leyden Museum, the two typical male specimens of *Pal. reunionnensis*, that were described by me in 1879, are now lying before me and they prove at once that this species is different from *Pal. neglectus*. In my paper of 1879 *Pal. reunionnensis* was said to be »quite different from *Pal. ornatus* Oliv.," but I am at present better acquainted with the great variability of *Pal. lar* Fabr., so that I now come to the conclusion that *Pal. reunionnensis* ought to be considered as a, probably local, variety of *Pal. lar* Fabr., distinguished by the legs of the second pair, these being equal and more elongated and by the fact that usually three teeth of the upper border of the rostrum are placed upon the cephalothorax (confer Figs. 1 and 5) [1]). The inferior margin of the rostrum carries 3 or 4 teeth. The cephalothorax is smooth and the telson agrees with that of *Pal. lar* Fabr. The fingers of the second pair of legs agree also fully with typical specimens of *Pal. lar* as regards their form and toothing (Fig. 3).

In the adult male, long 130 mm., the legs of the 1st pair extend with one fourth part of the carpus beyond the antennal scales; the carpus, 19 mm. long, is a little more than twice as long as the chela, that measures $8^1/_2$ mm., just as in *Pal. lar*.

Hoffmann's description and figures are inaccurate, as is proved by comparing them with mine.

Ierseke, October 1905.

1) It may be remarked that, in 1902, a specimen of the typical *Pal. lar* from Patani, on the island of Halmahera, has been described, in which also three teeth were placed upon the cephalothorax (de Man, in: Abhandl. Senckenb. Naturf. Gesellsch. T. XXV, p. 778).

EXPLANATION OF THE PLATE.

Fig. 1, *Palaemon* (*Eupalaemon*) *lar* Fabr. var. *reunionnensis* Hoffm., lateral view of the rostrum etc. of a typical male specimen, long 130 mm., from the Leyden Museum, × ¾; — Fig. 2, right leg of the second pair of this male, × ¾; — Fig. 3, fingers of this leg, × 2; — Fig. 4, a part of the upper surface of the palm of this leg, about in the middle, × 4, the inner border being at the left hand.

Fig. 5, *Palaemon* (*Eupalaemon*) *lar* Fabr., lateral view of the rostrum etc. of a male, long 115 mm., from the river near Tobelo, on the island of Halmahera, × ¾; this specimen, now in my private collection, has been described in: Abhandl. Senckenb. Naturforsch. Gesellsch. T. XXV, 1902, p. 777.

Fig. 6, *Palaemon* (*Eupalaemon*) *neglectus* de M., a typical male specimen, long 85 mm., from the Battak-Country, East Coast of Sumatra; view of the upper surface of the palm of the left leg of the second pair, × 4, the inner border being situated, in this figure, at the right hand. This specimen is also from my private collection.

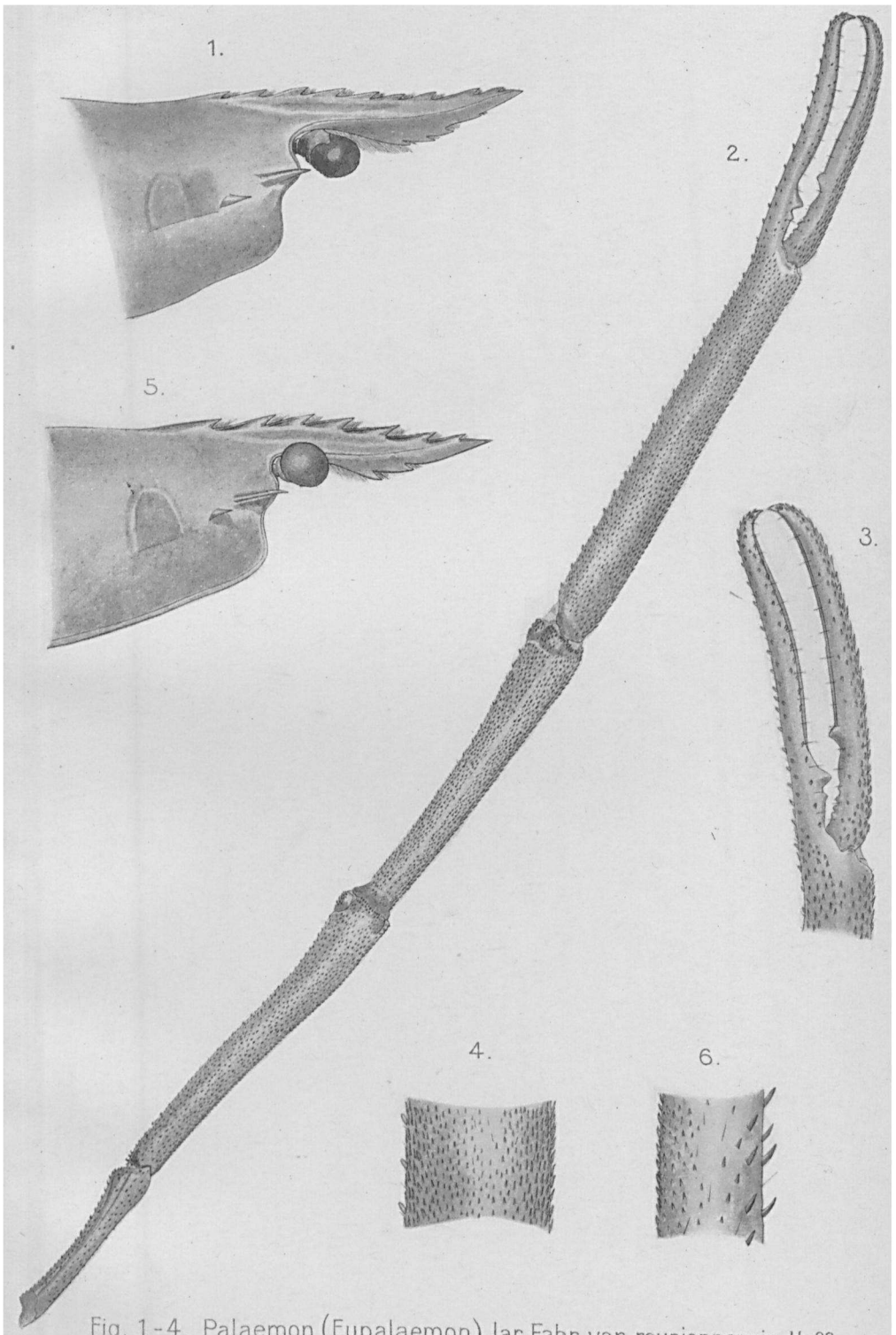

Fig. 1-4. Palaemon (Eupalaemon) lar Fabr. var. reunionnensis Hoffm.
Fig. 5. Pal. (Eupalaemon) lar. Fabr.
Fig. 6. Palaemon (Eupalaemon) neglectus de M.